



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/796,022

03/10/2004

Tatsutoshi Kitajima

250129US2

2125

22850

7590

04/21/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

04/21/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,022	<b>Applicant(s)</b> KITAJIMA, TATSUTOSHI	
	<b>Examiner</b> LUONG T. NGUYEN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/28/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 01/16/2008 have been fully considered but they are not persuasive.

In re pages 6-7, Applicant argues that Ejima fails to disclose or suggest a sharpness comparison device configured to compare sharpness based on a plurality of imaging data obtained by a imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness, as defined by amended Claim 1.

In response, regarding claim 1, the Applicant amended claim 1 with limitation “a sharpness comparison device configured to compare sharpness based on a plurality of imaging data obtained by a imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness.” It should be noted that the specification does not have support for the newly added limitation “a sharpness comparison device configured to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness.” Therefore, claim 1 will be rejected under 35 U.S.C. 112, first paragraph as set forth below.

### ***Claim Objections***

2. Claims 2-5, 7-10 are objected to because of the following informalities:

Claim 2 (lines 4-5), claim 3 (line 4), claim 4 (line 2), “a shake of the digital camera” should be changed to --the shake of the digital camera--.

Claims 3-5, 7-10 are objected as being dependent on claim 2.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 is amended with limitation “a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by the imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness.” The original specification, pages 15-18, and Figures 6A-6B only discloses the camera shake or blur is determined based on the compared sharpness. There is no disclosure of determining whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness.

For the purpose of examination, the Examiner will interpret the limitation “a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by the imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness” as “a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by the imaging data obtaining device, and wherein a shake of the camera or a blur of the subject is determined corresponding to the comparison result of the sharpness comparison device.”

Claims 2-10 are rejected as being dependent from claim 1.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Ejima (US 7,176,962).

Regarding claim 1, Ejima discloses a digital camera (digital camera 1, figures 1-3) having an image forming device configured to image a subject by a setup exposure condition and a digital image processing device configured to convert imaging data from the image forming device into a digital image, the digital camera comprising:

a set up device configured to set up a plurality of exposure conditions (capturing images 1, 2 at different shutter speeds (exposure conditions) at step S405, S409, figure 11, column 15, line 47 – column 16, line 45),

an imaging data obtaining device configured to obtain a plurality of imaging data imaged in accordance with the plurality of exposure conditions set by the setup device (capturing images 1, 2 at different shutter speeds (exposure conditions) at step S405, S409, figure 11, column 15, line 47 – column 16, line 45), and

a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by the imaging data obtaining device (compare the spatial frequency components, column 16, lines 20-33; column 22, lines 17 – 30),

wherein a shake of the camera or a blur of the subject is determined corresponding to the comparison result of the sharpness comparison device (an image blur is judged by comparing the spatial frequency components in the first image data and the second image data, column 16, lines 20-33; column 21 - column 22, line 30).

Noted that the limitation “a sharpness comparison device configured to compare sharpness based on the plurality of imaging data obtained by a imaging data obtaining device, and to determine whether a difference in sharpness of the plurality of imaging data is caused by a shake of a digital camera or a movement of a subject based on the compared sharpness” is interpreted as “a sharpness comparison device configured to compare sharpness based on a plurality of imaging data obtained by a imaging data obtaining device, and wherein a shake of

Art Unit: 2622

the camera or a blur of the subject is determined corresponding to the comparison result of the sharpness comparison device.”

Regarding claim 6, Ejima discloses the digital camera further comprising:

a display device configured to display an image processed by the digital image processing device (LCD 8, figure 2-3, column 5, lines 15-20; column 6, lines 1-5),

wherein a display time to the display device is made constant regardless of an exposure time in the image forming device (since the LCD 8 displays image data reproduced from memory card 25, the display time of image data on LCD 8 is not effected by exposure time in CCD 20, figure 3).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejima (US 7,176,962) in view of Satoh et al. (US 5,708,863).

Regarding claim 2, Ejima fails to specifically disclose a handshake preventing exposure output device configured to output an exposure time for preventing a blur in an image caused by

Art Unit: 2622

a shake of the digital camera based on a focal length of a photographic lens in the image forming device, wherein an existence of the camera shake is determined based on the exposure time output by the handshake preventing exposure time output device.

However, Satoh et al. teaches an image blur prevention device for a camera, which teaches the shake determining section 4 determines the current image blur state on the image plane on the basis of photographing focal length (figure 1, column 4, lines 5-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ejima by the teaching of Satoh et al. in order to provide an image blur prevention device for a camera, which reduces the influence of camera shakes on photographing operation and exhibits good operability without posing problems when a release time lag occurs (column 1, lines 63-67).

Regarding claim 7, Ejima discloses the digital camera further comprising:

a display device configured to display an image processed by the digital image processing device (LCD 8, figure 2-3, column 5, lines 15-20; column 6, lines 1-5),

wherein a display time to the display device is made constant regardless of an exposure time in the image forming device (since the LCD 8 displays image data reproduced from memory card 25, the display time of image data on LCD 8 is not effected by exposure time in CCD 20, figure 3).



Art Unit: 2622

9. Claims 3, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejima (US 7,176,962) in view of Satoh et al. (US 5,708,863) further in view of Ohishi et al. (US 5,713,049).

Regarding claim 3, Ejima and Satoh et al. fail to specifically disclose a warning device configured to warn of the shake of the digital camera when the existence of the shake of the digital camera is determined. However, Ohishi et al. teaches LCD 3 for displaying information such as camera-shake amount (figure 1, column 4, lines 40-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ejima and Satoh et al. by the teaching of Ohishi et al. in order to provide a camera-shake display device for a camera. This camera-shake display device informs various information on the camera-shake to a user of a camera (column 1, lines 34-35).

Regarding claim 8, Ejima discloses the digital camera further comprising:

a display device configured to display an image processed by the digital image processing device (LCD 8, figure 2-3, column 5, lines 15-20; column 6, lines 1-5),

wherein a display time to the display device is made constant regardless of an exposure time in the image forming device (since the LCD 8 displays image data reproduced from memory card 25, the display time of image data on LCD 8 is not effected by exposure time in CCD 20, figure 3).

Art Unit: 2622

10. Claims 4, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejima (US 7,176,962) in view of Satoh et al. (US 5,708,863) further in view of Yoshihara et al. (US 5,172,233).

Regarding claim 4, Ejima discloses a strobe is flashed in accordance with shortening the predetermined exposure time (figure 3, column 6, line 65 – column 7, line 3).

Ejima and Satoh et al. fail to specifically wherein when the existence of a shake of the digital camera is determined, a predetermined exposure time while recording a still image is shortened. However, Yoshihara et al. discloses a still electronic camera, in which in order to prevent blurring of photograph due to camera shaking, the exposure time is shortened to such a degree that camera shaking is regarded as negligible (column 1, lines 23 – 28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ejima and Satoh et al. by the teaching of Yoshihara et al. in order to obtain a clear photograph with high resolution (column 1, lines 23-25).

Regarding claim 9, Ejima discloses the digital camera further comprising:

a display device configured to display an image processed by the digital image processing device (LCD 8, figure 2-3, column 5, lines 15-20; column 6, lines 1-5),

wherein a display time to the display device is made constant regardless of an exposure time in the image forming device (since the LCD 8 displays image data reproduced from memory card 25, the display time of image data on LCD 8 is not effected by exposure time in CCD 20, figure 3).

11. Claims 5, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejima (US 7,176,962) in view of Satoh et al. (US 5,708,863) further in view of Imada (US 2004/0090532).

Regarding claim 5, Ejima and Satoh et al. fail to specifically wherein when a movement of the subject is determined to exist, a sensitivity for increasing the output of the imaging data while recording a still image is increased. However, Imada teaches that when it is desired to reduce affects from image blur by increasing the shutter speed, the image-taking sensitivity is set to be higher in accordance with the shutter speed increase (page 1, [005], [0012]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ejima and Satoh et al. by the teaching of Imada in order to reduce the affects from image blur (page 1, [005]).

Regarding claim 10, Ejima discloses the digital camera further comprising:

a display device configured to display an image processed by the digital image processing device (LCD 8, figure 2-3, column 5, lines 15-20; column 6, lines 1-5),

wherein a display time to the display device is made constant regardless of an exposure time in the image forming device (since the LCD 8 displays image data reproduced from memory card 25, the display time of image data on LCD 8 is not effected by exposure time in CCD 20, figure 3).

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Ometz/  
Supervisory Patent Examiner, Art Unit  
2622

/L.T.N/  
4/10/08